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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,717	06/28/2001	Dean Tran	12-1027	5142

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PATENT ADMINISTRATOR  
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EXAMINER

FLORES RUIZ, DELMA R

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/894,717

Applicant(s)

TRAN ET AL.

Examiner

Delma R. Flores Ruiz *DRF*

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

*Paul IP*

PAUL IP

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12/5/2003. 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7 – 9, and 11 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al (6,670,599) in view of Aronson et al (6,483,862).

***Regarding claims 1 and 11 – 13***, Wagner discloses a semiconductor with integrated monitoring comprising; a first light emitting semiconductor device (see Figs. 1 – 32) formed on a predetermined substrate (see Fig. 24, Character 2402); a passivation layer (see Fig. 24, Character 2404) formed on top of said first semiconductor device, wherein the remaining portion of said semiconductor device not covered said passivation layer forms a window (see Fig. 24, Character 2405). Wagner discloses the claimed invention except for a light-monitoring device formed on top of said passivation layer for monitoring leakage light from said first semiconductor device through said window. It would have been obvious at the time of applicant's invention, to combine

Aronson of teaching a light-monitoring device formed on top of said passivation layer for monitoring leakage light from said first semiconductor device through said window with semiconductor because the monitoring device (photodetector) structure that minimizes the capture of the spontaneous emission light output from the light emitting device by the photodetector while electrically isolating the light emitting device from the photodetector . The electrical isolation of the light emitting device from the photodetector results in a four terminal device in which the light emitting device and photodetector may be independently biased, and can therefore be operated at a very low bias voltage.

**Regarding claim 2,** Wagner disclose a first semiconductor device is an active device (see Figs. 1 – 32, Column 12, Lines 55 – 62).

**Regarding claim 7 – 9,** Wagner discloses a first device is a light emitting device, the light emitting device is a laser, said laser is a VCSEL (see Figs. 1 – 32, (Column 1, Lines 24 – 59, Column 3, Lines 15 – 67, Column 4, Lines 1 – 57).

Claims 3 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al (6,670,599) in view of Aronson et al (6,483,862) further in view of Jiang et al (5,719,893).

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***Regarding claims 3 – 5, Wagner in view of Aronson discloses a predetermined***

substrate is GaAs or InP or GaN substrate (Column 2, Lines 40 – 49). It would have been obvious at the time of applicant's invention, to combine Jiang of teaching a substrate is GaAs or InP or GaN substrate with semiconductor device because it would have been obvious to one having ordinary skill in the art at the time the invention was made to substrate is GaAs or InP or GaN substrate, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

***Response to Arguments***

Applicant's arguments filed 12/5/2003 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1 – 5, 7 – 9 and 11 – 13 have been considered but are moot in view of the new ground(s) of rejection.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.



Delma R. Flores Ruiz

Examiner

Art Unit 2828

DRFR/PI

January 13, 2004



Paul Ip

Supervisor Patent Examiner

Art Unit 2828